

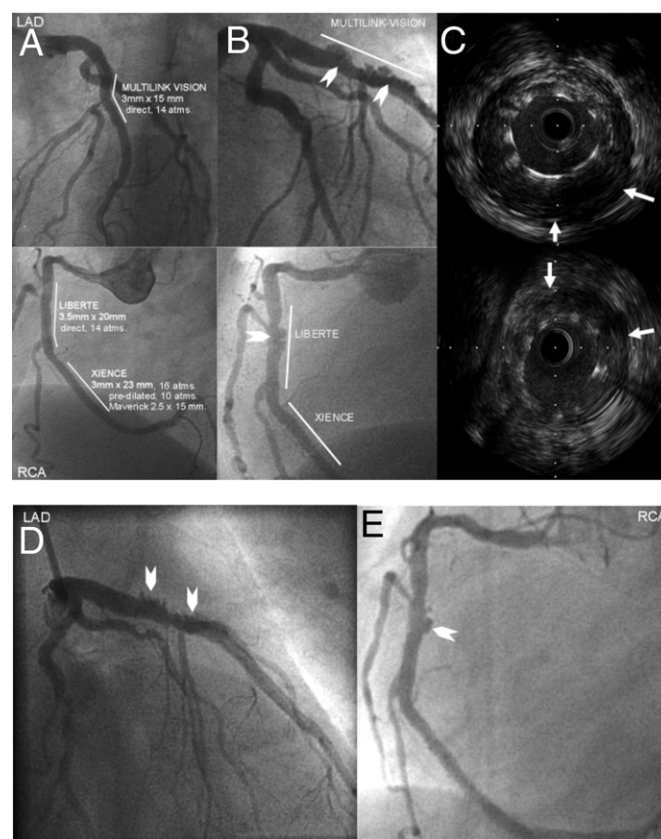
IMAGES IN CARDIOLOGY

Coronary Artery Aneurysm Formation Within New-Generation Bare-Metal Stents

Not Just Due to Drug Elution!

Sudipta Chattopadhyay, MD, Timothy Kinnaird, MD, Richard A. Anderson, MD

Cardiff, United Kingdom



From the Department of Cardiology, University Hospital of Wales, Cardiff, United Kingdom.
Manuscript received March 31, 2009; accepted April 6, 2009.

A 57-year-old woman with chronic stable angina underwent uncomplicated stenting in the left anterior descending artery (LAD) and right coronary artery (RCA) (A) with excellent results in the target vessel. Coronary angiogram repeated for atypical chest pain 6 months later demonstrated coronary artery aneurysm (CAA) (arrowheads) within the segments stented with a bare-metal stent (BMS) in both arteries (B), confirmed on intravascular ultrasound examination (C). Arrows show the extent of the aneurysm as seen on the intravascular ultrasound images. The RCA segment stented with the everolimus-eluting stent Xience (Abbott Laboratories, Abbott Park, Illinois) was free of aneurysm. History did not suggest any predisposition to aneurysm formation, and systemic arteritis was excluded. The patient was treated conservatively with life-long dual antiplatelet therapy to avoid compromising flow in branches arising from the aneurysmal segments. She remains well currently. Repeat angiogram (D and E) shows a partial regression of the aneurysms (arrowheads).

CAA within BMS is rare at 0.2% to 1.5% in recent trials. Simultaneous CAA within 2 different (stainless steel and cobalt-chromium) thin-strut corrugated-ring design BMS implanted in separate vessels in the same patient is a novel finding. This is unreported in Multilink Vision (Abbott Laboratories) and Liberte (Boston Scientific, Natick, Massachusetts) stents.